

REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are respectfully requested.

I. Amendments to the Claims

Independent claims 44, 48, 50, 51, 55 and 57 have been amended to clarify features of the claimed invention and to further distinguish the claimed invention from the references relied upon in the 35 U.S.C. § 103 rejection discussed below.

In addition, by this amendment claims 45, 49, 52 and 56 have been cancelled without prejudice or disclaimer of the subject matter recited therein.

II. 35 U.S.C. § 101 Rejection

Claims 48, 49, 55 and 56 were rejected under 35 U.S.C. § 101 for failing to fall within one of the statutory categories of invention.

This rejection is moot in regards to cancelled claims 49 and 56. Further, claims 48 and 55 have been amended to independent form and to recite a “non-transitory computer-readable recording medium having a program recorded thereon,” which is statutory subject matter.

As a result, withdrawal of this rejection is respectfully requested.

III. 35 U.S.C. § 103 Rejection

Claims 44, 45, 48-52 and 55-57 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicant Admitted Prior Art (AAPA) and NPL Draft ITU-Rec. H.264

(ITU). These rejections are believed clearly inapplicable to amended independent claims 44, 48, 50, 51, 55 and 57 for the following reasons.

Amended independent claim 44 recites (i) specifying (when field decoding is performed) a reference field (referred to when decoding a block) according to an extracted reference index and a field-index, (ii) specifying (when a value of an extracted reference index is double a value of the frame index), as the reference field, a field having a parity that is the same as a parity of a field including the block of picture data, out of two fields that make up the reference frame specified according to the frame-index, and (iii) specifying (when the value of the extracted reference index is double the value of the frame-index, plus one), as the reference field, a field having a parity that is different from the parity of the field including the block of picture data, out of the two fields that make up the reference frame specified according to the frame-index.

Applicants note that the above-mentioned rejection relies on section 8.3.6.2 of ITU for disclosing above-noted limitations (ii) and (iii) as now recited in amended independent claim 44 (see page 6 of the Office Action). However, ITU merely teaches that “[i]n field structured pictures, the picture number, PN, of a field that has frame number FN, is given by $PN = 2 \times FN$ if the field is a top field, and is given by $PN = 2 \times FN + 1$ if the field is a bottom field” (see section 8.3.6.2, paragraph 3). In other words, according to ITU, the picture number PN is even when the field is the top field, and the picture number PN is odd when the field is the bottom field.

Thus, in view of the above, it is clear that ITU teaches that when the field is a top field, $PN = 2 \times FN$, and when the field is a bottom field, $PN = 2 \times FN + 1$, but fails to disclose or suggest (ii) specifying (when a value of an extracted reference index is double a value of the frame index), as the reference field, a field having a parity that is the same as a parity of a field including the block of picture data, out of two fields that make up the reference frame specified

according to the frame-index, and (iii) specifying (when the value of the extracted reference index is double the value of the frame-index, plus one), as the reference field, a field having a parity that is different from the parity of the field including the block of picture data, out of the two fields that make up the reference frame specified according to the frame-index, as recited in claim 44.

Therefore, because of the above-mentioned distinctions it is believed clear that claim 44 and claims 45, 48 and 49 that depend therefrom would not have been obvious or result from any combination of the AAPA and ITU.

These above-noted differences between claim 44 and ITU are described/clarified in more detail below.

Initially, in order to make a comparison between claim 44 and ITU, for exemplary purposes only, the Applicants would like to identify a picture number (corresponding to the field specified in the last two “specifying” steps of amended Claim 44) as P_n , and identify the phrase “a value of the extracted reference index,” as recited in claim 44, as F_n . Now, using the above-noted nomenclature, amended Claim 44 has the following correspondence relationship between P_n and F_n :

(A) when “the block of picture data” (current block to be decoded) is part of a top field, $P_n = 2 \times F_n$, if the “specified field” is a top field, and $P_n = 2 \times F_n + 1$ if the “specified field” is a bottom field; and

(B) when “the block of picture data” (current block to be decoded) is part of a bottom field, $P_n = 2 \times F_n + 1$, if the “specified field” is a top field, and $P_n = 2 \times F_n$, if the “specified field” is a bottom field.

Put another way, according to claim 44 a reference field having a parity that is the same as a parity of a field including “the block of picture data” (the current block) is associated with a value $(2 \times F_n)$ that is double the value F_n of the frame-index, and a reference field having a parity that is different from the parity of the field including “the block of picture data” is associated with a value $(2 \times F_n + 1)$ that is double of the value F_n of the frame-index, plus one.

As stated above, amended Claim 44 is characterized by switching between the correspondence relationship (A) and the correspondence relationship (B) based on the parity of the field including “the block of picture data” (the current block).

Accordingly, as a result of the structure required by claim 44, when “the block of picture data” (the current block) is included in, for instance, a bottom field, a value of a field reference index is assigned as $P_n = 2 \times F_n + 1$ if the “specified field” is a top field and $P_n = 2 \times F_n$ if the “specified field” is a bottom field. Therefore, a field reference index having a small numeric value can be assigned to a reference field of the bottom field with respect to a current block to be decoded included (not in the top field but) in the bottom field, and thus it is possible to produce an advantageous effect of easily specifying an appropriate field in decoding.

In contrast, ITU does not make it possible to achieve the above correspondence described in (B), and to switch between the above (A) and (B) based on the parity of the field including “the block of picture data” (the current block).

Therefore, there is no disclosure or suggestion in the AAPA and/or ITU or elsewhere in the prior art of record which would have caused a person of ordinary skill in the art to modify the AAPA and/or ITU to obtain the invention of independent claim 44. Accordingly, it is respectfully submitted that independent claim 44 is clearly allowable over the prior art of record.

Amended independent claims 48, 50, 51, 55 and 57 are directed to a decoding program, a decoding apparatus, a coding method, a coding program, and a coding apparatus, respectively and each recite features that correspond to the above-mentioned distinguishing features of independent claim 44. Thus, for the same reasons discussed above, it is respectfully submitted that independent claims 48, 50, 51, 55 and 57 are allowable over the prior art of record.

IV. Conclusion

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

Kiyofumi ABE et al.

/Andrew L. Dunlap/

By 2010.09.13 12:47:29 -04'00'

Andrew L. Dunlap
Registration No. 60,554
Attorney for Applicants

ALD/led
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
September 13, 2010